

Listing of Claims

The following listing of claims replaces all previous listings or versions thereof:

1. (Currently amended) A method of providing transgenic fish to the ornamental fish market, comprising the steps of:

(a) obtaining ~~an ornamental~~ a transgenic fish comprising one or more ~~chimeric~~ fluorescence genes positioned under the control of a promoter, wherein the transgenic fish expresses one or more fluorescent proteins encoded by the one or more fluorescence genes ~~at a level sufficient such that said fish fluoresces upon exposure to one or more of a blue light, ultraviolet light or sunlight;~~ and

(b) distributing said fish to the ornamental fish market.

2. (Original) The method of claim 1, further comprising displaying said transgenic fish under a blue or ultraviolet light.

3. (Original) The method of claim 2, wherein the transgenic fish are displayed under an ultraviolet light that emits light at a wavelength selected to be optimal for the fluorescent protein or proteins.

4. (Original) The method of claim 3, wherein the transgenic fish comprise a GFP and are displayed under an ultraviolet light that emits light at 365 nm.

5. (Original) The method of claim 3, wherein the transgenic fish comprise a GFP and are displayed under an ultraviolet light that emits light at 395 nm.

6. (Original) The method of claim 3, wherein the transgenic fish comprise a GFP and are displayed under a blue light that emits light at 488 nm.

7. (Original) The method of claim 1, wherein the transgenic fish express a GFP.
8. (Previously presented) The method of claim 7, wherein the transgenic fish express an EGFP.
9. (Original) The method of claim 1, wherein the transgenic fish express a BFP.
10. (Original) The method of claim 9, wherein the transgenic fish express an EBFP.
11. (Original) The method of claim 1, wherein the transgenic fish express a YFP.
12. (Original) The method of claim 11, wherein the transgenic fish express an EYFP.
13. (Original) The method of claim 1, wherein the transgenic fish express a CFP
14. (Original) The method of claim 13, wherein the transgenic fish express an ECFP.
15. (Original) The method of claim 1, wherein the transgenic fish expresses more than one color of fluorescent protein.
16. (Original) The method of claim 1, wherein the promoter is a tissue specific promoter.
17. (Withdrawn) The method of claim 16, where the promoter is a skin specific promoter.
18. (Withdrawn) The method of claim 17, wherein the promoter is a zebrafish cytokeratin gene promoter.
19. (Withdrawn) The method of claim 16, wherein the promoter is a muscle specific promoter.

20. (Original) The method of claim 19, wherein the promoter is a zebrafish muscle creatine kinase gene promoter.
21. (Original) The method of claim 19, wherein the promoter is a zebrafish myosin light chain 2 gene promoter.
22. (Withdrawn) The method of claim 16, wherein the promoter is an eye specific promoter.
23. (Withdrawn) The method of claim 16, wherein the promoter is a bone specific promoter.
24. (Withdrawn) The method of claim 1, wherein the promoter is a ubiquitously expressing promoter.
25. (Withdrawn) The method of claim 24, wherein the promoter is a zebrafish acidic ribosomal protein gene promoter.
26. (Withdrawn) The method of claim 1, wherein the promoter is an inducible promoter.
27. (Withdrawn) The method of claim 26, wherein the inducible promoter is a hormone inducible promoter.
28. (Withdrawn) The method of claim 26, wherein the inducible promoter is a heavy metal inducible promoter.
29. (Original) The method of claim 16, wherein the transgenic fish expresses more than one fluorescent protein color.
30. (Original) The method of claim 29, wherein the more than one fluorescent protein is expressed in the same tissue, to effect a new fluorescent color.

31. (Original) The method of claim 30, where the transgenic fish expresses a GFP and a BFP.

32. (Original) The method of claim 29, wherein the more than one fluorescent proteins are separately expressed in different tissues.

33. (Withdrawn) The method of claim 32, wherein the transgenic fish expresses a GFP under the control of an eye specific promoter.

34. (Withdrawn) The method of claim 32, wherein the transgenic fish expresses a BFP under the control of a skin specific promoter.

35. (Original) The method of claim 32, wherein the transgenic fish expresses a YFP under the control of a muscle specific promoter.

36. (Currently amended) The method of claim 1, wherein the transgenic fish is a stable transgenic fish line obtained by a method comprising the steps of:

(a) ~~obtained an ornamental~~ obtaining a transgenic fish comprising one or more ~~chimeric~~ fluorescence genes positioned under the control of a promoter, wherein the transgenic fish expresses one or more fluorescent proteins encoded by the one or more fluorescence genes ~~at a level sufficient such that said fish fluoresces upon exposure to one or more of a blue light, ultraviolet light or sunlight; and~~

(b) breeding the ~~ornamental~~ transgenic fish with a second fish to obtain offspring; and

(c) selecting from said offspring a stable transgenic line that expresses one or more fluorescent proteins.

37. (Original) The method of claim 36, wherein the second fish is a wild type fish.

38. (Original) The method of claim 36, wherein the second fish is a second transgenic fish.

39. (Currently amended) The method of claim 1 or 36, wherein the ~~ornamental~~-transgenic fish is a transgenic zebrafish, medaka, goldfish or carp.

40. (Original) The method of claim 36, wherein the second fish is a zebrafish, medaka, goldfish or carp.

41. (Currently amended) The method of claim 1 or 36, wherein the ~~ornamental~~-transgenic fish is a transgenic koi, loach, tilapia, glassfish, catfish, angel fish, discus, eel, tetra, goby, gourami, guppy, Xiphophorus, hatchet fish, Molly fish, or pangasius.

42. (New) The method of claim 39, wherein the transgenic fish is a transgenic zebrafish.